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10/084,278	02/27/2002	Christopher P. Carson	50642/270980	7117

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EXAMINER	
PRIDDY, MICHAEL B	

ART UNIT	PAPER NUMBER
3732	10

DATE MAILED: 02/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/084,278	Applicant(s) CARSON, CHRISTOPHER P.	
	Examiner Michael B Priddy	Art Unit 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-20* is/are allowed.

6)☒ Claim(s) *21-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 June 2002* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4-9.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "24" has been used to designate both a monitor and an item. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: in lines 21, 24 and 27 of page 9, "according one" should be –according to one--.

Appropriate correction is required.

The disclosure is objected to because of the following informalities: in line 27 one incidence of "other" should be deleted.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 21, 22 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Kienzle, III et al. (U.S. 6,285,902). Kienzle, III et al. teaches a computer assisted targeting device for use in orthopaedic surgery comprising: an imager 114 for obtaining an image of a femur 101, wherein the imager 114 (note lines 28-32 of column 10 indicate imager 114 contains emitters 153) and the femur 101 are each attached to a fiducial 281 capable of being tracked by a position sensor 123; at least one position sensor 123 adapted to track position of said fiducials 281 & 153; a computer 142 adapted to store at least one image of the femur 101 and to receive information from said at least one sensor 123 in order to track position and orientation of said fiducials 281 & 153 and thus the femur 101; a medullary rod 285 adapted to be attached to a femur 101 using an impactor, said impactor attached to a fiducial, whereby the position of the medullary rod 285 is capable of being tracked by said sensor 123 and the position and orientation of the rod 285 is capable of being tracked by said computer 142; and a monitor 122 adapted to receive information from the computer 142 in order to display at least one image of said medullary rod 285 positioned and oriented relative to the femur 101 for navigation and positioning of the rod 285 on the femur 101.

Claim 23 is rejected under 35 U.S.C. 102(e) as being anticipated by Kienzle, III et al. Kienzle, III et al. teaches a computer assisted targeting device for use in orthopaedic surgery comprising: an imager 114 for obtaining an image of a femur 101, wherein the imager 114 (note lines 28-32 of column 10 indicate imager 114 contains emitters 153)

and the femur 101 are each attached to a fiducial 281 capable of being tracked by a position sensor 123; at least one position sensor 123 adapted to track position of said fiducials 281 & 153; a computer 142 adapted to store at least one image of the femur 101 and to receive information from said at least one sensor 123 in order to track position and orientation of said fiducials 281 & 153 and thus the femur 101; a unicompartmental knee arthroplasty surgical instrument 128 adapted to be associated with a fiducial which is attached to bone 101, wherey the position and orientation of the instrument 128 is capable of being tracked by said sensor 123; and a monitor 122 adapted to receive information from the computer 142 in order to display at least one image of said medullary rod 285 positioned and oriented relative to the femur 101 for navigation and positioning of the rod 285 on the femur 101.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 24, 25 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caspari et al. (U.S. 5,395,376) in view of Kienzle, III et al. Caspari et al. teaches a method and apparatus for prosthetic knee replacement comprising: a tibial trail implant (set forth in lines 33-40 of column 10) capable of being mounted on a tool, said tool attached to a fiducial, whereby the position of the tibial trial implant is

capable of being tracked by a sensor and the position and orientation of the trial implant is capable of being tracked by a computer; and a tibial implant 304 capable of being mounted to a tool, said tool attached to a fiducial, whereby the position of the tibial implant 304 is cabable of being tracked by said sensor and the position and orientation of the implant 304 is capable of being tracked by said computer; and a femoral trial implant (line 57 of column 10) capable of being mounted on a tool, said tool attached to a fiducial, whereby the position of the femoral trial implant is capable of being tracked by said sensor and the position and orientation of the trial implant is capable of being tracked by said computer; a femoral implant 292 capable of being mounted on a tool, said tool attached to a fiducial, whereby the position of the femoral implant 292 is capable of being tracked by said sensor and the position and orientation of the implant 292 is capable of being tracked by said computer.

Hence Caspari et al. teaches all of the limitations of the present invention except an imager for obtaining an image of a tibia and a femur, wherein the imager, the tibia and the femur are each attached to a fiducial capable of being tracked by a position sensor; at least one position sensor adapted to track the position of said fiducials; a computer adapted to store at least one image of each of the tibia and the femur and to receive information from said at least one sensor in order to track position and orientation of said fiducials and thus the tibia; a unicompartmental knee arthroplasty surgical instrument whose position is capable of being tracked by said sensor and whose position and orientation is capable of being tracked by said computer;; and a monitor adapted to receive information from the computer in order to display at least

one image of said instrument, at least one image of said femoral trial implant and at least one image of said femoral implant positioned and oriented relative to the femur for navigation and positioning of the instrument, the trial implant, and the implant on the femur.

Kienzle, III et al. teaches a computer assisted targeting device for use in orthopaedic surgery comprising: an imager 114 for obtaining an image of a tibia and a femur, wherein the imager 114, the tibia and the femur are each attached to a fiducial 281 capable of being tracked by a position sensor 123; at least one position sensor 123 adapted to track the position of said fiducials 281 & 153; a computer 142 adapted to store at least one image of each of the tibia and the femur and to receive information from said at least one sensor 123 in order to track position and orientation of said fiducials 281 & 153 and thus the tibia and femur; a unicompartmental knee arthroplasty surgical instrument 128 whose position is capable of being tracked by said sensor 123 and whose position and orientation is capable of being tracked by said computer 142; and a monitor 122 adapted to receive information from the computer 142 in order to display at least one image of said instrument 128, at least one image of a tibial trial implant, at least one image of a femoral trial implant, at least one image of a tibial implant and at least one image of a femoral implant positioned and oriented relative to the femur for navigation and positioning of the instrument 128, the trial implants, and the implants on the bones. It would have been obvious to one of ordinary skill in the art at the time of the present invention to use the system taught by Kienzle, III et al. to implant

the prosthetics of Caspari et al. to provide a surgeon with improved visualization of the relationship between surgical tools and the involved body part (col. 4, lines 6-8).

Allowable Subject Matter

Claims 1-20 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael B. Priddy whose telephone number is (703) 308-8620. The examiner can normally be reached on Mon.-Fri. 8 a.m. - 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (703) 308-2582. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael B. Priddy
Michael B. Priddy
February 3, 2004